

ABSTRACT

Novel purine L-nucleoside compounds are disclosed, in which both the purine rings and the sugar are either modified, functionalized, or both. The novel compounds or pharmaceutically acceptable esters or salts thereof may be used in pharmaceutical compositions, and such compositions may be used to treat an infection, an infestation, a neoplasm, or an autoimmune disease. The novel compounds may also be used to modulate aspects of the immune system, including modulation of Th1 and Th2.